



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/087,794	03/05/2002	Shinsuke Fukuda	P22035	2965
7055	7590	10/28/2003		
GREENBLUM & BERNSTEIN, P.L.C. 1950 ROLAND CLARKE PLACE RESTON, VA 20191				
			EXAMINER	
			GRAY, LINDA LAMEY	
			ART UNIT	PAPER NUMBER
			1734	
DATE MAILED: 10/28/2003				

Please find below and/or attached an Office communication concerning this application or proceeding.

## BEST AVAILABLE COPY

**Office Action Summary**

Application No.

10/087,794

Applicant(s)

FUKUDA ET AL.

Examiner

Linda L Gray

Art Unit

1734

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --****Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 19 August 2003.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                  | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other:  |

**Detailed Action**

**Claim Rejections - 35 USC § 112**

- 1.** The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

- 2. Claims 1-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.**

**Claims 1, 5, and 7,** use of "ordinary" renders the claims indefinite because it is unclear what is accompanied by this limitation and the specification does not define what is incorporated by "ordinary".

**Claim Rejections - 35 USC § 103**

- 3.** The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

- 4. Claims 1-2 and 5-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Macaulay et al. (US 3,708,349) in view of Watts (US 3,614,383).**

The statement of this rejection in the Office action of 5-19-03 applies herein. See page 2-5, paragraph.

**Claim 1,** also, *Maccaulay et al.* teach separator 7 is a resin and that separator 40 is a material impregnated with a resin. However, *Maccaulay* does not teach separators 7 and 40 to contain fibers.

However, Applicants' admitted prior art (p 1, L 14, to p 3, L 9 of specification) teaches that fiber/resin separators are conventional and it would have been obvious to a person of ordinary skill in the art at the time the invention was made to have provided fiber/resin

separators because it is obvious to replace one separator material with another art recognized alternative separator material.

Allowable subject matter: With respect to the limitation that the resin component is sublimed with heating, it is submitted that resins are sublimable with heating. However, it is noted that **claim 1** would be found allowable should the claim be written such that the resin component sublimes during cutting with heating. As currently written, claim 1 only requires a sublimable resin and does not require a process step of subliming the resin during cutting with heating. Maccaulay et al. alone or in combination with Watts does not teach subliming the resin component during cutting with heating; specifically, though the resin of Maccaulay et al. is sublimable and Maccaulay et al. in view of Watts suggest cutting with heating, the references do not teaching specifically that cutting is to occur such that sublimation of the resin component results using cutting with heating.

For **claims 5 and 7**, these are apparatus claims where the new limitation of "wherein the separator is made of an ordinary fiber cloth comprising a resin component which is sublimed by heating" is not a limitation directed to a structural feature of the claimed apparatus but refers to material worked upon. Product limitations of the material worked upon must result in a structural difference between the pending claims and the applied reference(s).

**5. Claims 4 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Macaulay et al. in view of Watts as applied to claims 1-3, 5-8, and 10 above, and further in view of Lehmacher et al. (US 3,384,528).**

The statement of this rejection in the Office action of 5-19-03 applies herein. See page 5-6, paragraph 4.

**6. Claims 3, 8, and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Macaulay et al. in view of Watts as applied to claims 1-3, 5-8, and 10 above, and further in view of Hermann (US 2,568,152).**

**Claims 3, 8, and 10,** Macaulay et al. modified do not teach a cushioning member opposite the bonding heating plate.

However, cushioning members opposite a cutter are conventional, see Herman who teaches cushion 28 under strip 26 were a member to be cut is placed for punching from above.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have provided in Macaulay et al. a cushioning member opposite the bonding heating plate because cushioning members opposite a cutter are conventional, see Hermann.

**Response to Arguments**

**7.** Applicants' comments filed 8-19-03 have been fully considered. See paragraph 4 above for Applicants' comments related to the new amendment to claims 1, 5, and 7 of "wherein the separator is made of an ordinary fiber cloth comprising a resin component which is sublimed by heating".

It is noted that Watts is not directed to the separator/electrode art; however, the combined sealer/cutter of Watts does seal and cut plastic materials to form a package where Applicants' also uses a combiner sealer/cutter to cut plastic materials to form a package. In this respect, the reference is considered pertinent.

A reference has been applied as requested for claims 3, 8, and 10 -- cushion limitation.

**Conclusion**

**8.** Applicants' amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, this action is made final. See MPEP § 706.07(a). Applicants are reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

**9.** Any inquiry concerning this communication or earlier communications should be directed to Examiner Linda L. Gray at (703) 308-1093, Monday-Friday from 6:30 am to 3:30 pm. The fax number is (703) 872-9306.

llg  
October 22, 2003

*Linda L. Gray*  
**LINDA GRAY**  
**PRIMARY EXAMINER**